

Board of County Commissioners Workshop Item

Date of Meeting: March 22, 2005
Date Submitted: March 17, 2005
To: Honorable Chairman and Members of the Board
From: Parwez Alam, County Administrator *PA*
Vincent Long, Assistant County Administrator
Richard Smith, Emergency Management Director, LCSO
Subject: Consideration of a Joint Dispatch and Emergency Operations Center.

Statement of Issue:

This agenda item presents analysis on the potential creation of a joint dispatch and emergency operations center for Leon County and the City of Tallahassee.

Background:

In May of 2004, the Sheriff approved a contract with RCC Consultants, Inc. (RCC) to perform a comprehensive analysis and feasibility study toward the creation of a consolidated communications dispatch and emergency operations center. During their Regular Meeting on October 26, 2004, the Board discussed the joint dispatch and emergency operations center issue during their consideration of a proposed contract to implement a new enhanced-911 dispatch system. At that time, the Board approved the scheduling of a workshop on the creation of a joint dispatch and emergency operations center. During their regular meeting on January 25, 2005, the Board approved the rescheduling of that workshop in order to accommodate the schedules of the Sheriff and the City Commission.

Analysis:

The Communications Consolidation Feasibility Study has been completed by RCC and provides the analysis for this workshop item. **Significantly, RCC recommends the full consolidation of 911 dispatch operations for LCSO, TPD, TFD, and EMS.** RCC determined that: "a fully consolidated dispatch center would better facilitate closest unit response to incidents that are independent of agency affiliation. It is anticipated that a consolidated Computer Aided Dispatch (CAD) will...minimize response times and increase the overall efficiency of all public safety agencies within the County." RCC shall be present at the workshop in order to answer any questions that the Board may have regarding their findings and recommendations (Attachment #1).

Options:

1. Accept the findings of this report and conduct the Workshop on Joint Dispatch and Emergency Operations Center.
2. Do not conduct the Workshop on Joint Dispatch and Emergency Operations.
3. Board Direction.

Recommendation:

Option #1



LEON COUNTY, FLORIDA
COMMUNICATIONS CONSOLIDATION FEASIBILITY STUDY

MARCH 2005



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1.0 EXECUTIVE SUMMARY

1.1 PROJECT OVERVIEW

The Leon County Sheriff's Office has embarked on a major project to address the way in which public safety communications is achieved through the dispatch process and to assess the staffing analysis in support of a consolidated or collocated public safety communications center. The goal is to improve services to the public by more efficiently handling both emergency and non-emergency calls and more effectively deploying public safety resources.

In support of the current project, the Sheriff's Office has contracted with RCC Consultants, Inc., (RCC) to review the current and projected requirements of each PSAP to determine appropriate staffing levels based on accurate call volumes, dispatch protocols and levels of service to staff and facilitate one consolidated communications center to replace multiple existing centers. RCC has analyzed the organization and operations of the Leon County Sheriff's Office communications operation and the Tallahassee Police Department's communications operation to determine what is required to staff and size a facility for one center to support dispatching operations for Leon County and the City of Tallahassee Police and Fire Departments.

1.2 REPORT SCOPE

This study presents a high-level description of operational, organizational, and logistical dispatch communications requirements for a consolidated/collocated County/City Dispatch Center and its impact to County and City residents and businesses. This report will identify potential benefits of such consolidation or collocation as well as potential drawbacks.

This report presents three alternative configurations for consolidated or collocated communications operations within Leon County, including the advantages, disadvantages, and associated fiscal impact of each viable option.

1.3 STAFFING ANALYSIS

Public safety communications centers require a high Grade of Service (GOS) to serve the public's needs to answer E9-1-1 calls and dispatch incidents. For public safety, the minimum GOS communications center design allows initial blocking (queuing) of 1% (P 0.01) of E9-1-1 calls. For this report, LCSO and TPD provided annual statistical data and RCC projected call quantities for the busy-hour. RCC then utilized Erlang-C analysis with busy-hour projections to define the minimum staffing requirements that provide a GOS of P 0.01 for each alternative. Survey data indicates that LCSO and TPD currently employ 39 and 53 personnel respectively in telecommunicator and telecommunicator supervisor positions for a total of 92 personnel. However, based on the telecommunicator availability calculation, LCSO and TPD staffing levels should be 55 and 50 personnel respectively. For the purpose of equal weighting in this staffing analysis, a quantity of 55 and 50 personnel respectively will be used for LCSO and TPD collocated staffing levels. The staffing analysis presented in Section 5.2 illustrates the following:

- No staffing or budgetary savings (staffing remains at current levels) is anticipated for the collocation alternative.
- Total telecommunicator personnel are reduced by 9.5 percent (10 people) in the partial consolidation alternative as compared to collocation.

- Total telecommunicator personnel are reduced by 19 percent (20 people) in the full consolidation alternative as compared to collocation. Additionally, it is anticipated that administrative and management personnel will be significantly reduced.

1.4 SYSTEMS CONSIDERATIONS

CAD – A **collocated** dispatch center would house separate LCSO and TPD CAD systems as they are operating now. In a **partially consolidated** configuration, common call takers would answer telephone/9-1-1 calls and enter incident information into a common “call taker” CAD system. The call taker CAD would then route the incident to the proper dispatcher and pass the incident data to that agency’s CAD system via a CAD-to-CAD interface. A **fully consolidated** communications center would require the utilization of one common CAD system by all the associated agencies.

1.5 PHYSICAL FACILITIES

A collocated dispatch center houses eight LCSO and nine TPD call taker positions, five LCSO and seven TPD dispatcher positions, two LCSO and two TPD supervisor positions; it is sized to handle four LCSO and five TPD extra call taker positions, two LCSO and five TPD extra dispatcher positions for future growth.

A partially consolidated dispatch center houses 10 common call taker positions, five LCSO and seven TPD dispatcher positions and two supervisor positions; it is sized to handle three extra call taker positions, one LCSO dispatcher position, and one TPD dispatcher position for future growth.

A fully consolidated dispatch center will house 10 call takers, 10 dispatchers and two supervisors; the center will be sized to handle three extra call taker positions and three extra dispatcher positions.

For each configuration above, RCC recommends that the proposed facility also include an 80-position EOC.

1.6 ADMINISTRATIVE STRUCTURE

In a collocated arrangement, the existing administrative/management staffs would remain as they are today. Appropriate office space would be required in the collocated dispatch center to accommodate each agency’s administrative/management personnel. Separate equipment, software, and policies could be utilized by the various collocated agencies.

In a partially consolidated configuration, a single management body should be established to manage the call taker operation. In Leon County’s case, this could be the Division of Emergency Management since they are already responsible for the E9-1-1 system.

In a fully consolidated dispatch operation, a single responsible administrative body should be installed to manage the operation. This administrative organization would manage the dispatch center operations and be responsible to an administrative board that includes representation of all operation stakeholders.

1.7 BUDGETARY CONSIDERATIONS

The staffing budgetary considerations are discussed for each alternative in Section 5.5. Estimated annual staffing cost reductions are presented in Table 1-1 below.

Table 1-1

Annual Staffing Budgetary Impacts	
Collocated Alternative	\$0
Partial Consolidation Alternative	\$390,000
Full Consolidation Alternative*	\$780,000 +

*Note: Additional savings of approximately \$293,750 may be realized in administrative and management staffing reductions.

Estimated CAD system implementation costs for consolidation options are summarized below in Table 1-2:

Table 1-2 CAD Implementation Estimates

Partially Consolidated Options	
Lawrence & Assoc. Call Taker CAD	\$40,700
Printrak Call Taker CAD	\$94,600
Fully Consolidated Options	
Upgrade LCSO CAD (Lawrence & Assoc.)	\$81,950
Upgrade TPD CAD (Printrak)	\$221,100
Procure New Tier 1 CAD	\$1,804,070

Table 1-3 Physical Facilities Estimates

Alternatives	Price (\$)
Collocated	\$9,034,215
Partially Consolidated	\$8,050,805
Fully Consolidated	\$ 7,649,807

1.8 RECOMMENDATIONS

RCC Consultants makes the following recommendations regarding public safety dispatch operations in Leon County:

- A. 9-1-1 Dispatch operations for LCSO, TPD, TFD and EMS should be fully consolidated. The following are arguments in support of full consolidation:

- **Improved Citizen/Officer Safety.** A fully consolidated dispatch center would better facilitate closest unit response to incidents that are independent of agency affiliation. It is anticipated that a consolidated Computer Aided Dispatch (CAD) system will recommend the nearest available unit. This will minimize response times and increase the overall efficiency of all public safety agencies within the County.

LCSO personnel reported that in the current operation, LCSO and TPD units may be dispatched to the same incident without coordination between the two dispatch facilities (each dispatch center receives a 9-1-1 call from a citizen for the same incident). This may be a waste of public safety resources and place officers in unnecessary danger. For example, a CAD system in a consolidated dispatch center would detect duplicate calls and allow the information from each caller to be combined into a single CAD incident record and facilitate an appropriate coordinated response.

In the current situation, with separate dispatch centers, 9-1-1 EMS calls may be improperly routed to TFD then transferred back to EMS because of a lack of public safety dispatch coordination. Protocol states that an incident with injuries should always be routed to EMS first. However, the current two-dispatch center configuration is vulnerable to this type of miscue.

- **Minimized 9-1-1 Call Transfers.** All 9-1-1 calls would be answered by a common group of call takers in a consolidated operation. This would eliminate transfers (and their associated life threatening delays) of 9-1-1 calls for the great majority of 9-1-1 calls in Leon County. 9-1-1 Calls for FSU, FAMU, and Capitol PD public safety agencies would continue to be transferred. The State 9-1-1 Plan (see Plan excerpt in Appendix 6) recommends against the transfer of 9-1-1 calls.
 - **Cost Reductions.** Consolidation could reduce the required quantity of telecommunicator personnel by up to 19 percent as compared to current staffing levels. It is anticipated that these reductions would be made through attrition over time with no initial layoffs in personnel. Thus, saving the taxpayers over \$780,000/year in telecommunicator salaries and benefits. Additionally, a reduction in communication center management personnel (half the management staff) is anticipated to further reduce personnel cost by approximately \$293,750/year. Other reductions may be realized in technical support personnel but are not quantified in this report. Consolidating dispatch will also reduce facilities costs (i.e., building maintenance, emergency power equipment, etc.).
 - **Common CAD Equipment.** Common CAD system equipment and software applications would simplify training and maintenance.
- B. Install a Single Management Body for the Consolidated Center.** The following are arguments in support of single-body management:
- Policies, salaries, and benefits would be uniform for all call takers, dispatchers, and supervisors.
 - Single person/agency responsible for center performance. The Sheriff's Office indicated that they have the capability and are willing to manage a consolidated communications center. In support of that position, they provided RCC with the results of a Statewide survey conducted in December 1998 where it was noted that 33 Florida Sheriff's Offices dispatch for police departments within their counties. Sheriff's Offices from 35 counties dispatch Fire/Rescue or EMS. Additionally, Sheriff Campbell Co-Chairs the North Florida Regional Domestic Security Task Force. The Task Force leadership has determined that in an incident involving more than one county in the local area, that they will co-locate their operations at the Leon County EOC.

C. Combine the consolidated dispatch center and an Emergency Operations Center (EOC) into a common facility. The following are arguments in support of a combined EOC/consolidated dispatch center:

- **Coordination.** During an EOC activation, coordination between the EOC and communications center personnel are critical to emergency operations. A combined EOC/consolidated dispatch center would facilitate coordination by placing command and communications personnel in close proximity. This improves the County/City's ability to respond to major emergency.
- **Facilities.** Dispatch and EOC could share similar required facilities such as security, emergency power, redundant communications circuits, radio communications, facility survivability requirements, etc.

D. Consolidation of the LCSO and TPD dispatch centers should be implemented as soon as possible. The previously recommended changes in dispatch communications would immediately benefit the citizens and public safety personnel of Leon County.

Both major dispatch centers (LCSO and TPD) are in need of more modern, adequately equipped space. The existing facilities are cramped, have inadequate space for growth and do not meet modern ergonomic standards. Given the space requirements of a consolidated dispatch center with an associated EOC, RCC recommends that a new facility be constructed that meets current and foreseeable future emergency communications requirements in Leon County.